Almost 36 percent of US adults recommended for blood pressure treatment under new guidelines

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More than 83 million adults would be recommended for high blood pressure treatment under the new system compared to 72 million under the prior recommendations, said senior study author Dr. Jiang He, Joseph S. Copes Chair of Epidemiology at Tulane University School of Public Health & Tropical Medicine. Photo by ThinkStock.

New, more intensive high blood pressure treatment guidelines could increase the number of U.S. adults categorized as having high blood pressure by 31 million and those receiving antihypertensive treatment by 11 million, according to a new study by Tulane University researchers.

The study, published in *JAMA Cardiology*, used national health data to estimate the impact of implementing the 2017 American College of Cardiology/American Heart Association hypertension guidelines, which call for doctors to more intensively manage hypertension for adults, aiming for blood pressure targets well below the 2014 guidelines. The new clinical guidelines eliminate "prehypertension" and define high blood pressure as beginning at 130/80 mm Hg instead of 140/90 mm Hg. The recommendations also call for earlier treatment with lifestyle changes and, in some patients, with medication.

The study estimates that 105.3 million, or more than 45 percent, of U.S. adults 20 years and older have hypertension under the new guidelines compared to 74 million (32 percent) under the old ones. The difference was greatest in men and those aged 40 to 59 years.

More than 83 million adults would be recommended for high blood pressure treatment under the new system compared to 72 million under the prior recommendations. While the new guidelines would significantly increase the prevalence of hypertension in the U.S, it would potentially save thousands of lives each year by making sure more patients are treated for high blood pressure.

"Achieving the 2017 guideline treatment goals may further reduce 340,000 cardiovascular events and 156,000 total deaths annually compared with the 2014 guideline treatment goals," said senior study author Dr. Jiang He, Joseph S. Copes Chair of Epidemiology at Tulane University School of Public Health & Tropical Medicine.

The new guidelines would potentially reduce a total of 334,000 deaths and 610,000 cardiovascular events, such as a heart attack or stroke, annually in adults 40 years and older in U.S.

The study found that the new treatment recommendations would have the largest effect in individuals 60 years and older with high cardiovascular risks, diabetes or chronic kidney disease. An additional 12 million adults with hypertension 60 years and older would require antihypertensive treatment and 19 million would need treatment intensification under the new guidelines.

Study co-authors include Tulane researchers Joshua Bundy, Katherine Mills, Dr. Jing

Chen and Dr. Changwei Li, and Dr. Philip Greenland of Northwestern University.